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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/585,347

07/27/2006

Shimpei Miura

128621

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25944 7590 11/23/2009

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ALEXANDRIA, VA 22320-4850

EXAMINER

MAPLES, JOHN S

ART UNIT

PAPER NUMBER

1795

MAIL DATE

DELIVERY MODE

11/23/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/585,347	Applicant(s) MIURA, SHIMPEI	
	Examiner John S. Maples	Art Unit 1795	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 August 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) 7-9, 11, 12 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5, 6 and 10 is/are rejected.
- 7) ☒ Claim(s) 4 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>7/6/2006; 7/24/2008</u> . | 6) <input type="checkbox"/> Other: _____ |

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1. Applicant's election with traverse of the species of claim 3 from Group I and the species of claim 4 from Group II in the reply filed on 10 August 2009 is acknowledged. The traversal is on the grounds that unity of invention should only be applied to independent claims; a reasonable number of dependent claims shall be permitted and the claims do share the common features of claim 1. This is not found persuasive because the issue at hand is an election of species and PCT rule 13.1 provides for such. Reference is also made to Chapter 10 of the WIPO Search & Examination Guidelines and in particular Example 23 which provides for election of species.

The requirement is still deemed proper and is therefore made FINAL.

It is noted that the species of claim 4 is found to comprise subject matter not subject to the application of prior art so the next species from claim 6 was examined and is rejected as outlined below.

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 6 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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It is unclear and indefinite what the word “longer” refers to; which word is found in line 3 of claim 6?

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

5. Claims 1-3, 5, 6 and 10 are rejected under 35 U.S.C. 102(a) as being anticipated by French 2831994. ('994)

Reference is made to pages 1-7 of '994 along with Figure 1 therein and the English language Abstract. Reference is also made to the Written Opinion dated 9 November 2005 (dated 24 September 2007 in the application file history), the ISA/210 dated 11 November 2005 (dated 24 September 2007 in the application file history) and the Official Letter dated 3 June 2008 (dated 24 July 2008 in the application file history). It is also noted that a complete translation of '994 has been ordered and a copy will be forwarded to applicant's representative when received by the examiner. The above noted portions set forth a fuel cell system including a fuel off-gas passage 10, a discharging mechanism that discharges fuel off-gas (circuit 12), a nitrogen concentration estimation mechanism (page 2, line 16-page 3, line 11), a discharge amount control mechanism (page 3, lines 7-11). The nitrogen concentration estimation

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mechanism estimates the nitrogen concentration from a rate of pressure drop in the fuel off-gas passage during discharge of the fuel off-gas by the discharging mechanism (page 2, line 32-page 3, line 6). It is inherent in the fuel cell system of '994 that the fuel-off gas passage is connected to the fuel gas passage as set forth in claim 5 and the discharge amount control mechanism would inherently open up for a period of time to discharge the nitrogen to the outside as recited in applicant's claim 6.

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Sugawara et al. teach a fuel cell including a nitrogen sensor of interest.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John S. Maples whose telephone number is 571-272-1287. The examiner can normally be reached on Monday-Friday, 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan can be reached on 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/John S. Maples/

John S. Maples
Primary Examiner
Art Unit 1795

JSM/11-9-2009